

IN THE CLAIMS

Claim 1 (Currently Amended): An image processing apparatus, comprising:

- an input part that inputs hyperdocument data;
- an embedding data generation part that generates coupling information from the hyperdocument data to specify related information related to an image element constituting a document image, wherein the related information is represented by an absolute path or is represented by a relative path with reference positional information ~~hyperdocument data includes appearance information defining location of embedding in the document image~~; and
- an embedding part that uses the coupling information to determine at least a portion of the image element to embed the coupling information, and embeds the coupling information by superimposing over the portion of the image element to form the document image of the hyperdocument data inputted by the input part,
 - wherein a configuration of pixels plotted in embedded areas is different from that in ordinary plotting areas.

Claim 2 (Currently Amended): The image processing apparatus according to claim 1, wherein the hyperdocument data includes appearance information defines defining the location of embedding image formation positions of the image element on the document image, and the embedding part performs embedding based on the appearance information.

Claim 3 (Original): The image processing apparatus according to claim 1, wherein the coupling information indicates a location of the related information.

Claim 4 (Original): The image processing apparatus according to claim 1, wherein the coupling information specifies information indicative of a location of the related information.

Claim 5 (Original): The image processing apparatus according to claim 1, wherein the coupling information specified the related information itself.

Claim 6 (Original): The image processing apparatus according to claim 1, wherein the embedding part embeds the coupling information in a form or color in which the coupling information is difficult to identify visually.

Claim 7 (Currently Amended): An image forming medium on which an image constituted by an image element is formed, wherein an embedding data generation part generates coupling information from hyperdocument data that determines at least a portion of the image element to embed the coupling information, specifies related information related to the image element to be superimposed over the portion of the image element such that the related information is represented by an absolute path or a relative path with reference positional information, and appearance information from the hyperdocument data defines location of embedding in an image document.

Claim 8 (Previously Presented): The image processing apparatus according to claim 2, wherein the appearance information is determined based on logical information.

Claim 9 (Previously Presented): The image processing apparatus according to claim 1, further comprising an identification generator that generates identification and manages correspondences between the identification and the coupling information.

Claim 10 (Currently Amended): An image processing method comprising:

 inputting hyperdocument data;

 generating coupling information from the hyperdocument data to specify related information related to an image element constituting a document image, wherein the coupling information is in a form of code value and the related information is represented by an absolute path or is represented by a relative path with reference positional information ~~hyperdocument data includes appearance information defining location of embedding in the document image~~;

 using the coupling information to determine at least a portion of the image element to embed the coupling information; and

 embedding the coupling information to the image element by superimposing over the portion of the image element to form the document image of the hyperdocument data inputted, wherein a configuration of pixels plotted in embedded areas is different from that in ordinary plotting areas.

Claim 11 (Currently Amended): The image processing method according to claim 10, wherein the hyperdocument data includes appearance information defines defining location of embedding the image formation positions of the image element on the document image, and the coupling information is embedded based on the appearance information.

Claim 12 (Previously Presented): The image processing method according to claim 10, wherein the coupling information indicates a location of the related information.

Claim 13 (Previously Presented): The image processing method according to claim 10, wherein the coupling information specifies information indicative of a location of the related information.

Claim 14 (Previously Presented): The image processing method according to claim 10, wherein the coupling information specified the related information itself.

Claim 15 (Previously Presented): The image processing method according to claim 10, wherein the coupling information is embedded in a form or color in which the coupling information is difficult to identify visually.

Claim 16 (Previously Presented): The image processing method according to claim 11, wherein the appearance information is determined based on logical information.

Claim 17 (Previously Presented): The image processing method according to claim 10, further comprising generating identification and managing correspondences between the identification and the coupling information.

Claim 18 (Currently Amended): An image processing apparatus comprising:

an input part that inputs hyperdocument data and coupling information to specify related information related to an image element constituting a document image, wherein the related information is represented by an absolute path or is represented by a relative path with reference positional information ~~the hyperdocument data includes appearance information defining location of embedding in the document image~~; and

an embedding part that uses the coupling information to determine at least a portion of the image element to embed the coupling information, wherein the hyperdocument data includes appearance information defining location of embedding in the document image, and embeds the coupling information ~~to~~ by superimposing over the portion of the image element to form the document image of the hyperdocument data inputted by the input part,

wherein image concentration of the coupling information is changed depending on image concentration of an area which the coupling information is embedded.

Claim 19 (Previously Presented): The image processing apparatus according to claim 18, wherein the image concentration of the coupling information increase when the image concentration of the area is lower than a predetermined value.

Claim 20 (Previously Presented): The image processing apparatus according to claim 18, wherein the image concentration of the coupling information decrease when the image concentration of the area is higher than the predetermined value.

Claim 21 (New): The image processing apparatus according to claim 1, wherein the reference positional information is embedded in the document image.

Claim 22 (New): The image forming medium according to claim 7, wherein the reference positional information is embedded in the document image.

Claim 23 (New): The image processing method according to claim 10, wherein the reference positional information is embedded in the document image.

Claim 24 (New): The image processing apparatus according to claim 18, wherein the reference positional information is embedded in the document image.